

REMARKS

This is in response to the Office Action dated February 18, 2010. Claims 1 and 3-18 are pending and stand rejected in the outstanding Office Action. Claim 20 has been cancelled.

Applicant thanks the Examiner for consideration of the Information Disclosure Statement filed November 12, 2009.

The rejections of claim 20 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement, and under 35 U.S.C. §112, second paragraph, as allegedly being indefinite, is respectfully traversed. Claim 20 has been cancelled, thus the above rejections are moot.

The rejection of claim 1 under 35 U.S.C. §103(a), as allegedly being unpatentable over Ishikawa et al. (US 5,509,973) in view of Meadows (US 3,455,080), is respectfully traversed.

In response to Applicant's argument filed with the response of 11/12/2009, that Ishikawa's edge face sealing member consists of separate members 5 which capture the four edges of the solar cell, the Examiner stated that "there is nowhere in Applicant's specification defining integral consists of one member. On the contrary, the integral frame-like shape edge face sealing shown in Fig. 1 includes four pieces connected together to form a frame (see the separating line at each corner of the frame)". Moreover, the Examiner provided a definition for "integral" as "composed of integral parts", and stated that Ishikawa teaches the grading channel members 5 surrounding the solar cell body 4 to form a frame-like shape as seen in Fig. 5, wherein each member fits to an edge of the solar cell body 4, see p. 14 of the Office Action of February 18, 2010.

First, the line at each corner in Fig. 1 of the instant specification, describes an edge that is formed by which a plurality of surfaces intersect in three-dimensional space. This line

describing the edge of each section does not represent that the four sections are separate and it is within the scope of ordinary skill for a person skilled in the art.

Second, in the definition provided by the Examiner, “integral” is defined as essential to completeness or lacking nothing essential. Thus, “integral” means one member, and if it applied to the invention of claim 1, the edge face sealing member should be construed as one frame-like shape member.

Therefore, the edge face sealing member of the invention of claim 1 consists of one member and “integral” is utilized as a word to represent it. Also, this is repeatedly recited in the specification. For example, paragraph [0061] recites “...one or more edge face sealing members, frame-like in shape and ...is or are prepared; such edge face sealing member or members capturing at least one of the solar cell module body or bodies along substantially the entire edge portion perimeter thereof, and with these in this state, these being captured within at least one of the frame body or bodies.”

That is to say, the specification clearly recites that “the edge face sealing member, frame-like in shape, is prepared”; “the edge face sealing member is capturing the solar cell module body along an entire edge portion perimeter thereof”; and “with these in this state, the edge face sealing member is captured within the frame”.

In view of this, even if the edge face sealing member is not captured within the frame body, the edge face sealing member is clearly capturing the solar cell module body along an entire edge portion perimeter thereof. This is realized since the edge face sealing member is preformed in the frame-like shape of one member.

In contrast, in Ishikawa or Meadows, four sealing members are inserted along each of four sides of the solar cell module or glass (see Fig. 5); hence the resulting structure must

produce gaps between the adjacent sealing members. Thus, the structure of Ishikawa or Meadows is not the sealing member capturing the solar cell module body along the entire edge portion perimeter thereof.

Furthermore, paragraph [0018] of the instant specification recites the problem of conventional art as follows: “Moreover, there has also been the problem that because waterproofing member 61 is bent unnaturally at the corner portion(s) of frame body 5, it has been necessary to have another waterproofing member made available for such portion(s), and it has been difficult to adequately ensure water tightness at especially the corner portion(s)”, emphasis added.

The invention of claim 1 provides the effects, as recited in paragraph [0061], as follows: “Because a construction is thus adopted in which frame-shaped, integral-type edge face sealing member(s) capture solar cell module body or bodies along substantially the entire edge portion perimeter thereof, definitive sealing of solar cell module body or bodies is permitted, permitting definitive prevention of entry by water”, emphasis added.

As stated above, the invention of claim 1 has these distinct effects because the edge face sealing member is preformed in the frame-like shape of one member and there are no gaps at the corner portions. Therefore, the edge face sealing member is clearly preformed in the frame-like shape of one member, as indicated by the phrase in paragraph [0063], “in which frame-shaped, integral-type edge face sealing member(s).

The edge face sealing members 5 in Ishikawa are multiple separate members, each capturing a side edge of the glass panel. Moreover, the language of claim 1 recites “the edge face sealing member itself, which is an integral frame-like shape”. An object that is shaped as a

linear member, e.g., 5 in Fig. 5 of Ishikawa is not shaped as a frame, e.g., “an enclosing border”, according to a Webster’s definition.

In addition, even though Meadows teaches that the member 10 provides sealing of the entire edge portion perimeter of the glass pane 27, however, member 10 is merely a frame (which has to cover the entire periphery of the enclosed glass pane). One of ordinary skill in the art would not have looked at the shape of a frame to modify the shape of an edge face sealing member that is fitted inside the frame, as was suggested by the Examiner.

Finally, even though Figs. 6 and 7 in Ishikawa appear to show that the tongues of the members 5 are completely flattened, Applicant submits that the structure of the frame including frame members 6 and 7 is such that when the member 5 is held by the frame members, there is no pressure to cause the tongues to completely flatten. For example, Fig. 3 shows the shape of the edge face sealing member 5 when member 5 is within the frame. Even though there is some elastic deformation when the solar panel 4 was fitted into the members 5, the tongues of members 5 are not completely flattened even though the members 5 are within the frame.

For the above reasons, claim 1 is allowable. Claim 14 includes limitations similar to those of claim 1, and is also allowable.

It is respectfully requested that the rejection of claims 3-13 and 15-18, each being dependent from claim 1 or 14, also be withdrawn.

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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